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DEPARTMENT OF WATER AND POWER

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May 18, 1983

Mr. James H. Anthony
Project Director
Intermountain Power Project
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Alternative Strategies for Modification of
the Intermountain Power Project (IPP)
Air Quality Approval Order

This is to document the alternative strategies for modification of the existing IPP Air Quality Approval Order that were presented to you and your staff by members of the Advanced Projects, Environmental and Regulatory Affairs Subsection at your meeting on May 5, 1983. These strategies were developed as a result of a meeting held between representatives of the IPP and the Utah Department of Health (DOH) on April 29, 1983. Attachment 1 provides a detailed discussion of this meeting and Attachment 2 provides a suggested strategy proposed by the law firm of Hunton & Williams regarding this issue.

The strategies to be considered for modification to the existing Air Quality Approval Order are as follows:

(1) The IPP could continue to firmly maintain the legal position that the Best Available Control Technology (BACT) review by the DOH should be limited only to a determination that the proposed changes in particulate, sulfur dioxide (SO_2) and oxides of nitrogen (NOx) control equipment will comply with emission limits specified in the existing approval order even at the increased boiler size. The most effective course of action to be pursued by IPP under this strategy would be to convince the Governor's Office of the State of Utah of its validity and to recommend that the Governor's Office give appropriate direction to the DOH.

The advantage of this strategy is that such a limited BACT review will result in full compliance with existing approval order limits without additional operating constraints, design changes, additional costs or new emission limits. The disadvantage of this strategy is that it gives maximum exposure to legal challenge by intervenors.

(2) IPP could submit, under protest, to a limited BACT review as proposed by DOH and provide technical and economic support information to ensure a reasonable BACT determination for SO_2, NOx and particulate emissions for IPP.

The advantage of this strategy is that it will likely minimize the probability that such a legal challenge will be rejected by the courts should it occur. The disadvantage of this strategy is that a new BACT determination by the DOH could result in additional operating constraints, design changes, additional costs, or new permit emission limits. Also, should a legal challenge by intervenors be upheld by the courts under this strategy, resolution of the BACT issue would be even more complicated because it becomes a technical issue rather than a procedural or legal issue.

(3) The IPP could pursue strategy number 2 above for SO_2 and particulate control and, in addition, agree to a new permit emission limit for NOx expressed in pounds per hour (lbs/hr). This new permit limit would be identical to the emission rate previously approved by the DOH for the nominal boiler heat rate. Commitments could be made by IPP to maintain this emission rate even at increased boiler heat input through various operating procedures.

The advantage of this strategy is that a new BACT review for NOx emission control should not be required because there will be no increase in NOx emission, yet the boiler could possibly operate at maximum heat input. The potential disadvantages of this strategy are as follows:

(A) A recommendation by IPP of a new lbs/hr NOx emission limit in the existing approval order may also suggest new lbs/hr emission limits for SO_2 and particulates.

(B) A lbs/hr NOx emission limit in the approval order may unreasonably constrain operation of the generating station.

(C) The inclusion of a lbs/hr emission limit for any pollutant in an approval order may establish a precedent for future approval orders which may be undesirable.

(4) The IPP could agree not to operate the boiler above the nominal heat input previously approved by the DOH.

The principal advantage of this strategy is that a new BACT review for NOx emissions for IPP should not be required because there is no increase in NOx emissions. The disadvantage of this strategy is that the boilers would effectively be load limited. Also, additional approval order conditions and/or design changes may be imposed by DOH to ensure enforceability of this nominal boiler heat input.

In addition to consideration of the above strategies, it is recommended that the following information be provided to DOH:

(1) A position paper providing legal justification for allowing construction to continue at IPP prior to and during the permit modification process.

(2) Information regarding the cost of retrofitting Selective Catalytic Reduction (SCR) Systems at IPP.

If you have any questions or if further information is required, please contact Mr. Roger T. Pelote on extension 3412.

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RTP:gp

Attachments

cc: w/Attachments
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Attachment 1

Meeting with the Utah Department of Health (DOH)
April 29, 1983

A meeting was held on April 29, 1983 among representatives of the Utah DOH, the Utah State Attorney General's Office, the Intermountain Power Project (IPP), the Washington, D.C. law firm of Hunton & Williams and the Utah law firm of Van Cott, Bagley, Cornwall & McCarthy to discuss IPP air quality permit modification issue. Attached is a list of attendees.

Air Quality Control Equipment

The Utah DOH stated the following regarding the air quality control systems proposed for IPP:

(1) A new limited review of Best Available Control Technology (BACT) will be required by the DOH for sulfur dioxide (SO_2), particulate and oxides of nitrogen (NOx) control systems. This limited review will consider the adequacy of the original BACT analysis, the appropriateness of the original BACT analysis for 1983, and the proposed control equipment changes in the context of existing air quality permit requirements.

(2) The DOH has reviewed the specifications for the fabric filter systems for IPP and is prepared to recommend that these systems are BACT for particulate control at the existing permit emission limit of 0.02 lbs/MBTU.

(3) The DOH is currently completing review of the specifications for the limestone scrubber for IPP. Although the DOH has previously approved an application for 95 percent SO_2 removal efficiency as BACT, the DOH will likely approve the proposed IPP scrubber as BACT at 90 percent SO_2 removal efficiency.

(4) The DOH has made little progress in the limited BACT review of NOx control for IPP. The DOH will require additional information on low NOx burner design and operation in order to evaluate this technology as BACT. The final BACT determination for IPP could range anywhere from existing low NOx burners to selective catalytic reduction (SCR) systems.

- In addition, a new permit limit for NOx emissions may be required. (Discussions with DOH staff after the meeting revealed that consideration is being given for a new NOx permit limit of 0.45 lbs/MBTU.)

Status of Construction

At the request of the DOH, a brief update on the status of construction at the IPP site was provided. The DOH responded to this information by stating that the current construction is not valid under the existing air quality permit and that IPP is building a source without proper approval from the DOH. It was emphasized that erection of steel at the site violates Utah state law and that the DOH is authorized to issue a "Cease and Desist Order" to IPP for such violations. However, it appears that the DOH will not issue such an order at the present time unless pressured to do so by environmental groups.

A recommendation was made by IPP representatives for the DOH to consider separate approval orders for SO_2, NOx and particulate control systems, as opposed to a single approval order for all three systems. This could result in immediate approval of the baghouse and scrubber systems which would allow construction of these systems to legally continue while the NOx control issue is being resolved. The DOH appeared somewhat receptive to this recommendation at the meeting; however, it was later learned that the DOH had decided not to issue separate approval orders unless legal action regarding the status of construction at IPP was initiated by environmental groups. At such time, the DOH would likely issue a separate approval order for the baghouse.

Attachment

Attendance - April 29, 1983

Ronald Nelson	IPP Project Office, DWP
Roger Pelote	APERA, DWP
Stephen Clark	APERA, DWP
Reed Searle	Government Relations Manager, IPA
Clark Layton	Director, Federal Government Relations, IPA
James Holtkamp	IPA legal counsel
Henry Nickel	IPA legal counsel
Brent Bradford	Director, Bureau of Air Quality, DOH
Fred Nelson	Utah legal counsel
Monty Keller,	Assistant Director, Bureau of Air Quality, DOH
David Kopta	Staff Engineer, DOH